

IN THE CLAIMS:

Please cancel without prejudice Claims 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 48 and 49.

- 1 1. (Original) A method of producing a gas discharge panel, comprising:
 - 2 an envelope forming step for forming an envelope by providing over a first plate a second plate so that the second plate faces a main surface of the first plate, on which partition walls for partitioning light emitting cells have been formed;
 - 5 a sealing step for sealing the envelope with a sealant along outer edges of the first and second plates;
 - 7 an exhaust step for exhausting gas from the envelope; and
 - 8 a filling step for filling the envelope with a discharge gas, wherein the exhaust step includes:
 - 10 a substep for evacuating the envelope;
 - 11 a substep for filling the envelope with a cleaning gas that includes as a constituent a gas that substantially causes no impurity in the discharge gas; and
 - 13 a substep for re-evacuating the envelope.

- 1 2. (Cancelled)

- 1 3. (Original) The gas discharge panel producing method according to Claim 1, wherein the sealant is disposed between the first and second plates, the entire envelope is heated at a temperature that is no lower than one of a softening point and a melting point of the sealant while

4 a pressure in the envelope is set lower than a pressure outside of the envelope, and the envelope
5 is cooled at the sealing step.

1 4. (Cancelled)

1 5. (Original) The gas discharge panel producing method according to Claim 1, wherein a step
2 for inserting a getter into a container that is linked to an internal space of the envelope is
3 included between the sealing step and the exhaust step.

1 6. (Cancelled)

1 7. (Original) The gas discharge panel producing method according to Claim 3, wherein a step
2 for inserting a getter into a container that is linked to an internal space of the envelope is
3 included between the sealing step and the exhaust step.

1 8. (Cancelled)

1 9. (Original) The gas discharge panel producing method according to Claim 1, wherein the
2 entire envelope is heated at a temperature that is no higher than one of a softening point and a
3 melting point of the sealant at the exhaust step.

1 10. (Cancelled)

1 11. (Original) The gas discharge panel producing method according to Claim 3, wherein the
2 entire envelope is heated at a temperature that is no higher than one of the softening point and the
3 melting point of the sealant at the exhaust step.

1 12. (Cancelled)

1 13. (Original) The gas discharge panel producing method according to Claim 5, wherein the
2 entire envelope is heated at a temperature that is no higher than one of a softening point and a
3 melting point of the sealant at the exhaust step.

1 14. (Cancelled)

1 15. (Original) The gas discharge panel producing method according to Claim 7, wherein the
2 entire envelope is heated at a temperature that is no higher than one of the softening point and the
3 melting point of the sealant at the exhaust step.

1 16. (Cancelled)

1 17. (Original) The gas discharge panel producing method according to Claim 3, wherein the
2 entire envelope is cooled to a temperature that is higher than room temperature and no higher
3 than one of the softening point and the melting point of the sealant at the sealing step.

1 18. (Cancelled)

1 19. (Original) The gas discharge panel producing method according to Claim 11, wherein the
2 entire envelope is cooled to a temperature that is higher than room temperature and no higher
3 than one of the softening point and the melting point of the sealant at the sealing step.

1 20. (Cancelled)

1 21. (Original) The gas discharge panel producing method according to Claim 1, wherein the
2 sealing step includes:

3 a substep for disposing the sealant between the first and second plates, and heating
4 the entire envelope to a temperature that is no lower than one of a softening point and a melting
5 point of the sealant while a dry gas is circulated through the envelope; and
6 a substep for heating the entire envelope at a temperature that is no lower than one of
7 the softening point and the melting point of the sealant while a pressure in the envelope is set to
8 be lower than a pressure outside of the envelope, and cooling the envelope.

9 22. (Cancelled)

1 23. (Original) The gas discharge panel producing method according to Claim 21, wherein a step
2 for inserting a getter into a container that is linked to an internal space of the envelope is
3 included between the sealing step and the exhaust step.

1 24. (Cancelled)

1 25. (Original) The gas discharge panel producing method according to Claim 21, wherein the
2 entire envelope is heated at a temperature that is no higher than one of the softening point and the
3 melting point of the sealant at the exhaust step.

1 26. (Cancelled)

1 27. (Original) The gas discharge panel producing method according to Claim 23, wherein the
2 entire envelope is heated at a temperature that is no higher than one of the softening point and the
3 melting point of the sealant at the exhaust step.

1 28. (Cancelled)

1 29. (Original) The gas discharge panel producing method according to Claim 21, wherein the
2 entire envelope is cooled to a temperature that is higher than a room temperature and no higher
3 than one of the softening point and the melting point of the sealant at the sealing step.

1 30. (Cancelled)

1 31. (Original) The gas discharge panel producing method according to Claim 25, wherein the
2 entire envelope is cooled to a temperature that is higher than a room temperature and no higher
3 than one of the softening point and the melting point of the sealant at the sealing step.

1 32. (Cancelled)

1 33. (Original) The gas discharge panel producing method according to Claim 1, wherein the
2 sealant is disposed between the first and second plates, sealed edges of the first and second plates
3 are heated at a temperature that is no lower than one of a softening point and a melting point of
4 the sealant while a pressure in the envelope is set lower than a pressure outside of the envelope,
5 and the envelope is cooled at the sealing step.

1 34. (Cancelled)

1 35. (Original) The gas discharge panel producing method according to Claim 33, wherein a step
2 for inserting a getter into a container that is linked to an internal space of the envelope is
3 included between the sealing step and the exhaust step.

1 36. (Cancelled)

1 37. (Original) The gas discharge panel producing method according to Claim 33, wherein the
2 entire envelope is heated at a temperature that is no higher than one of the softening point and the
3 melting point of the sealant at the exhaust step.

1 38. (Cancelled)

1 39. (Original) The gas discharge panel producing method according to Claim 35, wherein the

2 entire envelope is heated at a temperature that is no higher than one of the softening point and the
3 melting point of the sealant at the exhaust step.

1 40. (Cancelled)

1 41. (Original) The gas discharge panel producing method according to Claim 1, wherein the
2 cleaning gas is the discharge gas.

1 42. (Original) The gas discharge panel producing method according to Claim 41, wherein the
2 discharge gas is a noble gas.

1 43. (Original) The gas discharge panel producing method according to Claim 42, wherein the
2 noble gas includes at least one of helium, neon, argon, and xenon.

1 44. (Original) The gas discharge panel producing method according to Claim 1, wherein the
2 light emitting cells are formed by positioning a first group of parallel electrodes on the first plate
3 orthogonally to a second group of parallel electrodes on the second plate with a distance between
4 the first and second electrode groups.

1 45. (Original) The gas discharge panel producing method according to Claim 41, wherein the
2 light emitting cells are formed by positioning a first group of parallel electrodes on the first plate
3 orthogonally to a second group of parallel electrodes on the second plate with a distance between
4 the first and second electrode groups.

1 46. (Original) The gas discharge panel producing method according to Claim 42, wherein the
2 light emitting cells are formed by intersecting a first group of electrodes that have been disposed
3 on the first plate in parallel and a second group of electrodes that have been disposed on the
4 second plate in parallel with a distance between the first and second groups.

1 47. (Original) The gas discharge panel producing method according to Claim 43, wherein the
2 light emitting cells are formed by intersecting a first group of electrodes that have been disposed
3 on the first plate in parallel and a second group of electrodes that have been disposed on the
4 second plate in parallel with a distance between the first and second groups.

1 48. (Cancelled)

1 49. (Cancelled)